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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/670,529	09/27/2000	Yannick Albertone	AD6649 US NA	6969	
23906	7590 07/17/2002	we your of the			
E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128			EXAMI	EXAMINER	
			BOYD, JEN	BOYD, JENNIFER A	
	ASTER PIKE ON, DE 19805		ART UNIT	PAPER NUMBER	
	·	•	1771	6	
			DATE MAILED: 07/17/2002	~	

Please find below and/or attached an Office communication concerning this application or proceeding.

			AS-6			
•		Application No.	Applicant(s)			
Offic Action Summary		09/670,529	ALBERTONE ET AL.			
		Examiner	Art Unit			
		Jennifer A Boyd	1771			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
THE MA - Extensior after SIX - If the peri - If NO per - Failure to - Any reply	TENED STATUTORY PERIOD FOR REPLY LING DATE OF THIS COMMUNICATION. s of time may be available under the provisions of 37 CFR 1.13 (6) MONTHS from the mailing date of this communication. od for reply specified above is less than thirty (30) days, a reply od for reply is specified above, the maximum statutory period w reply within the set or extended period for reply will, by statute, received by the Office later than three months after the mailing tent term adjustment. See 37 CFR 1.704(b).	66(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
	esponsive to communication(s) filed on 27 S	September 2000 .				
	· · · · · · · · · · · · · · · · · · ·	s action is non-final.				
3)□ S	· -					
Disposition		=x parto quayro, 1000 0.b. 11, 4	.00 0.0. 210.			
4)⊠ Cla	aim(s) 1-21 is/are pending in the application					
4a)	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)⊠ Cla	Claim(s) <u>7</u> is/are allowed.					
6)⊠ Cla	☑ Claim(s) <u>1-6 and 8-12</u> is/are rejected.					
7)⊠ Cla	Claim(s) <u>1-12</u> is/are objected to.					
8) Claim(s) 13-21 are subject to restriction and/or election requirement.						
Application	•					
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action. 12)⊠ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
<i>,</i> —	a) ☐ All b) ☐ Some * c) ☐ None of:					
، <u></u> . ا.1		s have been received				
2.[on No			
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)	3	,,				
1) Notice of 2) Notice of	References Cited (PTO-892) Draftsperson's Patent Drawing Review (PTO-948) on Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal I	/ (PTO-413) Paper No(s) Patent Application (PTO-152)			

DETAILED ACTION

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - Claims 1 12, drawn to laminate structure, classified in class 442, subclass
 394.
 - II. Claims 13 15, drawn to process for production of laminate structure,classified in class 156, subclass various.
 - III. Claims 16-21, drawn to an insulation system, classified in class 442, subclass 59.
- 2. The inventions are distinct, each from the other because of the following reasons: Inventions of Group II and Group I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product can be made by a materially different method such as by thermal bonding or laminating.
- 3. Invention of Group III is unrelated to inventions of Group II and Group I. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are unrelated because it is not clear that the laminate created in Group I can be used in the insulation system of Group III and/or created by the process of Group II.

- 4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- 5. During a telephone conversation with Arne R. Jarnholm on June 21, 2002 a provisional election was made without traverse to prosecute the invention of the laminate structure, claims 1-12. Affirmation of this election must be made by applicant in replying to this Office action. Claims 13-21 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
- 6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Oath/Declaration

7. The Applicants have not given a post office address anywhere in the application papers as required by 37 CFR 1.33(a), which was in effect at the time of filing of the oath or declaration. A statement over applicant's signature providing a complete post office address is required.

Claim Objections

8. Claims 1 - 12 are objected to because of the following informalities: in claim 1, the use of the phrase "comprised attached". It is unclear whether the Applicant omitted

the composition of the moisture vapor control layer or means "a moisture vapor control layer attached to said substrate". Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 9. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 10. Claims 1 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 11. Claim 1 does not specify the order of the laminate layers. It only specifies that the moisture vapor control layer is attached to substrate. Can the moisture vapor control layer be attached to the substrate by another layer?
- 12. Claim 1 does not specify what comprises the moisture vapor control layer.
- 13. Claim 7 recites the limitation "the process of claim 6" in line 1. There is insufficient antecedent basis for this limitation in the claim. Claim 6 discloses an article claim and does not make reference to a process.
- 14. Claim 7 recites ISO 2411. It is unclear what the standard is and the testing method is not set forth in the Specification.
- 15. Claim 7 recites the limitation "film layers" in line 1. The only film mentioned in the previous claims is the moisture vapor control layer.
- 16. Claim 12 does not specify the location of the second substrate layer and the adhesive or primer.

Claim Rejections - 35 USC § 103

- 17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 18. Claims 1 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trouilhet (EPA 94300233.7) in view of Wofford (US 6,214,477) and Mueller (US 5,532,053).
- 19. As to claim 1, Trouilhet discloses a laminate structure comprising a substrate layer comprising a woven or non-woven material (column 2, lines 34 46). Trouilhet discloses another layer attached to a substrate (column 3, lines 29 32). Trouilhet discloses a tie layer comprised of co-monomers of ethylene and vinyl acetate (column 4, lines 29 39) and a layer comprised of copolyether ester (column 2, lines 47 58).
- 20. As to claims 2 4, Trouilhet discloses a layer in a laminate structure comprised of an ethylene copolymer (column 3, lines 35 36) in which the thickness ranges from 1- 5 microns implying a film (column 3, lines 45 48).
- 21. As to claim 5, Trouilhet discloses a layer comprised of copolyether ester, which has a thickness of 5-15 microns (column 2, lines 47-55 and column 3, lines 23-27) and a layer referred to as a "tie layer" which has a thickness of 1-5 microns (column 4, lines 44-47).

- 22. As to claim 6, Trouilhet discloses a "porous substrate" layer in which the non-woven material comprises polyethylene terephthalate, polypropylene or high-density polyethylene (column 2, lines 40 45).
- 23. As to claim 12, Trouilhet discloses an adhesive layer in the laminate structure (column 5, lines 40 46).
- 24. As to claims 1, 8 and 9, Trouilhet is silent regarding the composition weight percentages for both the tie layer and the copolyether ester layer. Wofford discloses a multi-layer film with a polyethylene vinyl acetate tie layer with vinyl acetate content of between 10% and 35% by weight of EVA (column 9, lines 47 54) to strengthen the bond between the film layers. It would have been obvious to one of ordinary skill in the art to create a laminate of Trouilhet with the tie layer as specified by Wofford. It would have been obvious to one of ordinary skill in the art to create a laminate structure with the tie layer as specified by Wofford in order to create a more durable bond between layers. Mueller discloses a laminate film in which one of the layers is composed of a total weight percentage of polyether ester copolymer of 35 wt % and higher (Abstract) in order to provide strength to the laminate film. It would have been obvious to one of ordinary skill in the art to create a laminate of Trouilhet with a polyether ester layer as specified by Mueller. It would have been obvious to one of ordinary skill in the art to create a laminate structure with the polyether ester layer in order to create a durable laminate film.
- 25. As to claim 12, Trouilhet is silent regarding a second substrate layer. Mueller discloses that additional 100% polyolefin substrate layers may be bonded to the high moisture transmission laminate film (Abstract). It would have been obvious to one of ordinary skill in the art to create a laminate of Trouilhet with additional 100% polyolefin

substrate layers as suggested by Mueller. It would have been obvious to one of ordinary skill in the art to create a laminate structure with additional substrate layers in order to add support to the structure.

- 26. As to claim 7, although Trouilhet, Wofford and Mueller do not explicitly teach the claimed bond strength of at least 1 N/m, it would have been obvious to one of ordinary skill in the art to optimize the bond strength through the process of routine experimentation through such means as the selection of the components in the tie layer, process parameters, etc., in order to arrive at a strong material since these are known to be result effective variables.
- 27. As to claims 10 and 11, although Trouilhet, Wofford and Mueller do not explicitly teach the claimed MVTR inequality and ratio, it is reasonable to presume that the MVTR is inherent to the laminate structure of Trouilhet and Wofford. Support for said presumption is found in the use of like materials and the use of like processes which would result in claimed property. The burden is upon Applicant to prove otherwise. Note In re Fitzgerald 205 USPQ 495.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Boyd whose telephone number is 703-305-7082. The examiner can normally be reached on Monday thru Friday 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Jennifer Boyd July 9, 2002 ELIZABETH M. COLE PRIMARY EXAMINER